SECTION I INTRODUCTION

In 1994, the State Water Resources Control Board (SWRCB) rescinded the Inland Surface Waters Plan (ISWP) and the Enclosed Bays and Estuaries Plan (EBEP) in response to a court ruling. Since that time, California has not been in compliance with the 1987 amendments to the Federal Clean Water Act (CWA), which requires the states to adopt water quality criteria for the priority toxic pollutants (priority pollutants) listed in Section 307(a) of the CWA (Table I-1). This action prompted the U.S. Environmental Protection Agency (U.S. EPA) to initiate the promulgation of Federal criteria for these pollutants (which will apply to California's non-ocean surface waters) to bring the State into compliance. This U.S. EPA action is called the California Toxics Rule (CTR). Concurrently, the SWRCB is working toward developing a new ISWP and EBEP.

To coordinate the ISWP/EBEP process with the CTR process, the development of these two statewide water quality control plans is occurring in two phases. Phase 1 of ISWP/EBEP process is the development and adoption of a State policy for water quality control whose primary purpose is to establish implementation provisions for the Federal priority pollutant criteria being promulgated under the CTR.[1] That policy, titled "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California", is the subject of the proposed action decribed in this document.

Phase 2 of ISWP/EBEP process will involve the establishment of State-adopted water quality objectives for the priority pollutants and incorporation of the Phase 1 policy in a new ISWP and EBEP. Upon U.S. EPA approval of the State's priority pollutant objectives, the U.S. EPA will withdraw the CTR.

PURPOSE OF DOCUMENT

The purpose of this document is to present the SWRCB's analysis of the need for and the effects of the proposed "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California" (proposed Policy) (i.e., Phase 1 of ISWP/EBEP development). The SWRCB must comply with the requirements of the California Environmental Quality Act (CEQA) when adopting state policy for water quality control. CEQA authorizes the Secretary of the Resources Agency to certify a regulatory program of a State agency as exempt from the requirements for preparing Environmental Impact Reports (EIRs), Negative Declarations, and Initial Studies if certain conditions are met. The process that the SWRCB is using to adopt the proposed Policy has received certification from the Resources Agency to be "functionally equivalent" to the CEQA process (Title 22, California Code of Regulations, Section 15251(g)). Therefore, this report is called

[1] The CTR was released in draft for public review on August 5, 1997 (Federal Register, Vol. 62, No. 150, 42160-42208).

TABLE I-1. SECTION 307(a) PRIORITY POLLUTANTS

acenaphthene
acenaphthylene (PAH)
acrolein
acrylonitrile
aldrin
anthracene (PAH)
antimony
arsenic
asbestos
1,2-benzanthracene (PAH)
benzene
benzidine
benzo(a)pyrene (3,4-benzopyrene)(PAH)
3,4-benzofluoranthene (PA)
benzo(k)fluoranthene (PAH)
benzo(g,h,i)perylene (PAH)
beryllium
bromoform (tribromomethane)
bromomethane (methyl bromide)
4-bromophenyl phenyl ether
cadmium
carbon tetrachloride (tetrachloromethane)
chlordane
chlorobenzene (monochlorobenzene)
chlorodibromomethane (halomethane)
chloroethane (monochloroethane)
chloroethyl ether (bis-2)
1-chloroethoxyl methane (bis-2)
2-chloroethyl vinyl ether
4-chloro-3-methylphenol
chloromethane (methyl chloride)
chloroform (trichloromethane)
2-chlorophenol
chloroisopropyl ether (bis-2)
2-chloronaphthalene
4-chlorophenyl phenyl ether
chromium (hex)
chromium (tri)
chyrsene (PAH)
copper
cyanide
4,4-DDT
4,4-DDE
4,4-DDD
dibenzo(a,h)anthracene (PAH)
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene,
3,3-dichlorobenzidine
1,2-dichloroethane
1,1-dichloroethane
1,1-dichloroethylene
1,2-trans-dichloroethylene
dich1orobromomethane (halomethanes)
dichloromethane (halomethanes)
2,4-dichlorophenol
1,2-dichloropropane
1,3-dichloropropene
dieldrin
2,4-dimethylphenol
diethylphthalate
dimethylphthalate
2,4-dinitrotoluene
2,6-dinitrotoluene
2,4-dinitrophenol
2,3,7,8-TCDD (dioxin)
1,2-diphenylhydrazine
alpha endosulfan
beta endosulfan
endosulfan sulfate
endrin
endrin aldehyde
ethylbenzene
fluorene (PAH)
fluoranthene
heptachlor
heptachlor epoxide
hexachloroethane
hexachlorobenzene
hexachlorobutadiene
hexachlorocyclohexane (lindane)
hexachlorocyclohexane (alpha)
hexachlorocyclohexane (beta)
hexachlorocyclohexane (delta)
hexachlorocyclopentadiene
ideno (1,2,3-cd) pyrene (PAH)
isophorone
lead
mercury
naphthalene
nickel
nitrobenzene
2-nitrophenol
4-nitrophenol
4,6-dinitro-2-methylphenol
nitrosodimethylamine-n
nitrosodiphenylamine-n
n-nitrosodi-n-propylamine
PCB 1242
PCB 1254
PCB 1221
PCB 1232
PCB 1248
PCB 1260
PCB 1016
phenol
pentachlorophenol
phenanthrene (PAH)
bis(2-ethyl-hexyl) phthalate
butyl benzyl phthalate
di-n-butyl phthalate
di-n-octyl-phthalate
selenium
pyrene (PAH)
silver
1,1,2,2-tetrachloroethane
tetrachloroethylene
tha1lium
toluene
toxaphene
1,2,4-trichlorobenzene
1,1,1-trichloroethane
1,1,2-trichloroethane
trichloroethylene
2,4,6-trichlorophenol
vinyl chloride (chloroethylene)
zinc

a Functional Equivalent Document (FED) and fulfills the requirements of CEQA for preparation of an environmental document. The environmental impacts that could occur as a result of the proposed action are discussed under Section VI, "Environmental Effects of the Proposed Policy", and summarized in an Environmental Checklist Form in Section VII.

BACKGROUND

In 1972, Congress enacted the Clean Water Act (CWA) to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[2] To achieve this goal, Congress created the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the point source discharge of pollutants to surface waters.[3] Permits are issued by either the United States Environmental Protection Agency (U.S. EPA) or by designated state agencies in states with approved permit programs.[4] Under the CWA, the permits are required to include effluent limitations reflecting pollution reduction achievable through technology, as well as any more stringent limitations necessary to ensure that the receiving waters meet water quality standards.[5]

Water quality standards consist of designated beneficial uses for state waters and water quality criteria to protect those uses.[6] Under the CWA, the states are primarily responsible for the adoption, and periodic review,[7] of water quality standards. In limited circumstances, however, the U.S. EPA may step in and promulgate standards. For example, the U.S. EPA can promulgate standards were a state does not act to adopt or update a standard under circumstances in which U.S. EPA has determined a new or revised standard is necessary to meet CWA requirements.[8]

In 1973, the U.S. EPA authorized the SWRCB and the Regional Water Quality Control Boards (RWQCBs) to issue NPDES permits. In addition, the State Legislature designated the SWRCB as the State water pollution control agency for all purposes under the CWA and

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[2] See U.S.C. §1251(a).

[3] See U.S.C. §§1311(a), 1342.

[4] See 33 U.S.C. §1342(b).

[5] See 33 U.S.C. §1311(b)(1)(A), (B), and (C).

[6] See 33 U.S.C. §1313(c)(2)(A).

[7] The states are required to review and, if necessary, revise standards at least once every three years--a process commonly referred to as triennial review. See 33 U.S.C. §1313(c)(1).

[8] See 33 U.S.C. §1313(c)(3)-(4).

authorized the SWRCB to adopt water quality control plans, which contain water quality standards, for all waters for which water quality standards are required under the CWA.[9]

In 1987, Congress, in response to a concern over the states' rate of adoption of water quality criteria for toxic pollutants, amended the CWA. The amendments required the states to adopt criteria for all priority toxic pollutants[10] which could interfere with the designated uses of state waters and for which U.S. EPA had published criteria guidance under Section 304 of the CWA.[11] The U.S. EPA interpreted this new provision, contained in Section 303(c)(2)(B), to require that the states adopt numeric criteria for the priority pollutants by February 4, 1990.[12]

In response, the SWRCB adopted the Inland Surface Waters Plan (ISWP) and the Enclosed Bays and Estuaries Plan (EBEP) in 1991. These two statewide water quality control plans contained water quality objectives[13] for the majority of the priority toxic pollutants.

In 1992, the U.S. EPA promulgated the National Toxics Rule (NTR) to bring noncomplying states into compliance with Section 303(c)(2)(B).[14] The NTR established numeric criteria for priority pollutants for 14 states, including California. The NTR for California primarily covered those priority pollutants, which numbered approximately 40, that were not covered in the ISWP and EBEP. In addition, the NTR applied freshwater selenium criteria to selected waters in the State because the U.S. EPA concluded that the existing State water quality objectives were not sufficiently stringent.

Several lawsuits were filed against the SWRCB over the ISWP and the EBEP. In 1994, in response to an adverse ruling by the Sacramento County Superior Court[15], the SWRCB rescinded the plans.[16] Consequently, the only numeric criteria for priority pollutants that are applicable statewide to the inland surface waters, enclosed bays, and estuaries in California

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[9] See Water Code §§13160, 13170.

[10] Section 307(a)(1) of the Clean Water Act requires the U.S. EPA to publish a list of toxic pollutants. This list is contained in 40 CFR 401.15. It includes 65 elements, compounds, and families of compounds. U.S. EPA has interpreted the list to include 126 "priority pollutants".

[11] 33 U.S.C. §1314.

[12] 33 U.S.C. §1313(c)(2)(B); see 55 Federal Register 14350-14356 (April 17, 1990).

[13] State water quality objectives are equivalent to water quality criteria adopted pursuant to Section 303(c) of the Clean Water Act.

[14] See 57 Federal Register 60848-60923 (December 22, 1992), codified at 40 CFR 131.36.

[15] Water Quality Control Cases, Judicial Council Coordination Proceeding No. JC 2610.

[16] See SWRCB Resolution No. 94-87. This resolution rescinded both the ISWP and the EBEP, which had been amended in 1993 to include the approximately 40 priority pollutants that were not addressed in the 1991 ISWP and EBEP. When the ISWP/EBEP were rescinded, the 1993 amendments were also rescinded. The NTR remains in effect for those constituents.

are the approximately 40 criteria contained in the NTR.

To bring California into compliance with Section 303(c)(2)(B), the U.S. EPA is proposing to promulgate the California Toxics Rule (CTR). The proposed CTR contains a complete set of water quality criteria for priority toxic pollutants, including those previously promulgated in the NTR as well as criteria for the remaining constituents.

The SWRCB is proposing to adopt a water quality control policy (i.e., the proposed Policy which is supported by this FED) to implement the CTR criteria, once they are adopted, and the priority pollutant objectives adopted by the RWQCBs for inland surface waters, enclosed bays, and estuaries that are not superseded by the CTR. The proposed Policy also contains monitoring requirements for 2,3,7,8-TCDD equivalents and chronic toxicity control provisions.

ISWP/EBEP PUBLIC ADVISORY TASK FORCES

After the 1993 ISWP and EBEP were rescinded in September 1994, eight public advisory task forces were formed to assist the SWRCB and its staff in developing a new ISWP and EBEP. These eight issue-specific task forces were: Chemical-Specific Objectives; Site-Specific Objectives; Toxicity; Agricultural Waters; Effluent-Dependent Waters; Permitting and Compliance Issues; Watershed; and Economic Considerations. Each task force was comprised of representatives from eleven interest groups. The ISWP/EBEP task forces met between April and October 1995 to address and make recommendations on key issues related to development of the ISWP and EBEP. Their respective reports, which were submitted to the SWRCB at its November 1995 Board Meeting, are presented in one document titled, "Reports of the Public Advisory Task Forces to the State Water Resources Control Board Regarding Development of the Inland Surface Waters Plan and the Enclosed Bays and Estuaries Plan" (ISWP/EBEP Task Forces 1995).

In March of 1996, an SWRCB staff workshop was held to receive public comments on the task force recommendations. The purpose of the workshop was to gather information that would be used to define the scope of a new ISWP and EBEP given limited SWRCB resources. That staff workshop was followed by a public survey to assign priorities to the issues identified by the task forces. Out of that process, the decision to coordinate the State and Federal activities (i.e., focus State resources on developing implementation provisions for the Federal CTR criteria) was made.

SCOPE OF FED

The FED was developed with a consideration of: existing State and Federal statutes, regulations, and policies; the current provisions of the 10 regional water quality control plans (basin plans) (listed at beginning of Literature Cited); the current provisions of the California Ocean Plan (Ocean Plan) (SWRCB 1990a); the provisions of the rescinded ISWP and EBEP (SWRCB 1993a, SWRCB 1993b); U.S. EPA guidance documents (e.g., U.S. EPA 1991); and the recommendations of the ISWP/EBEP public advisory task forces (ISWP/EBEP Task

Forces 1995).

In addition to this section (Section I - Introduction), the FED presents seven major sections: Section II - Existing Regulatory Conditions and Addition of the CTR; Section III - Project Description; Section IV - Environmental Setting; Section V - Analyses of Issues and Alternatives; Section VI - Environmental Effects of the Proposed Policy; Section VII - Environmental Checklist; and Section VIII - Economic Considerations.[17]

Several appendices are included with the FED. They are: Appendix A - Acronyms and Abbreviations (used in the FED); Appendix B - Definition of Terms (used in the FED); Appendix C - State-Adopted Priority Pollutant Objectives (contained in basin plans); Appendix D - Types of Nonpoint Source Discharges; Appendix E - (a list of existing) SWRCB Water Quality Control Policies and Plans (relevant to the proposed Policy); and Appendix F - Deferred Issues (issues identified by the task forces that will be addressed in Phase 2 of the ISWP/EBEP and beyond).

NOTES TO ASSIST READER

To assist the reader's review of this FED, the following information is provided:

- The chapter numbers in Section V (Analyses of Issues and Alternatives) correspond with the section numbers in the proposed Policy and the issue numbers in Section VI (Environmental Effects of the Proposed Policy).

- The term "criterion" or "criteria" refer to the Federal priority pollutant criteria promulgated by the NTR and proposed in the CTR. The term "objective" or "objectives" refer to water quality objectives adopted by the RWQCBs or SWRCB. The terms "criterion" and "objective" are essentially comparable in that, taken together with designated beneficial uses, they comprise water quality standards.

- The term "waste discharge requirements" (or WDRs) includes both NPDES permits and non-NPDES WDRs. References to WDRs refers to both types of permits; references to NPDES permits (which apply to point source discharges to surface waters) refers to that type of permit only.

- The acronym "WQBELs" (meaning "water quality-based effluent limitations"), a Federal term, is used within the context of the CTR; the term "effluent limitations" is used within the context of the proposed Policy. Each term has the same meaning.

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[17] Portions of the environmental effects and economic considerations analyses were not completed in time to include in this FED. These analyses are: economic case study of intake water credits; environment effects and economic analysis of reporting levels; environmental effects of means of compliance and economic case studies on toxicity control provisions; and economic case studies of nonpoint source control measures. These analyses will be released in a supplement to the FED in October 1997.